

WHAT IS CLAIMED IS:

1. An optimizing planer system comprising:
  - (a) a control system;
  - 5 (b) a workpiece feed path;
  - (c) an optimizing planer operably coupled to the control system, the optimizing planer located along the workpiece feed path and having an entrance, for receipt of a rough workpiece, and an exit, for discharge of an at least partially finished workpiece, the optimizing planer having a cutting element;
  - 10 (d) a workpiece interrogator situated along the workpiece feed path upstream of the entrance and operably coupled to the control system so to provide the control system with workpiece property information for each workpiece entering the optimizing planer;
  - (e) the control system constructed to provide the optimizing planer with control information based upon the workpiece property information for each workpiece;
  - 15 (f) the optimizing planer constructed to move at least one of the workpiece and the cutting element as the workpiece passes through the optimizing planer according to the control information for each workpiece.
2. An optimizing planer system comprising:
  - 20 (a) an optimizing planer having an entrance, for receipt of a rough workpiece, and an exit, for discharge of an at least partially finished workpiece, the optimizing planer having a cutting element;
  - (b) means for interrogating each workpiece entering the optimizing planer and creating workpiece property information therefor;
  - 25 (c) control system means, operably coupled to the workpiece interrogating means, for providing the optimizing planer with control information based upon the workpiece property information for each workpiece; and

(d) the optimizing planer comprising means for moving at least one of the workpiece and the cutting element as the workpiece passes through the optimizing planer according to the control information for each workpiece.

5 3. A method for planer optimization comprising:

(a) feeding a series of workpieces to an optimizing planer;  
(b) interrogating each workpiece prior to entering the optimizing planer to formulate workpiece property information for each workpiece;

(c) creating control information for each workpiece from the workpiece property  
10 information; and

(d) controlling the cutting operation of the optimizing planer for each workpiece based upon the control information for each workpiece.

4. An optimizing planer system comprising:

15 (a) a control system;  
(b) a workpiece feed path;  
(c) an optimizing planer operably coupled to the control system, the optimizing planer located along the workpiece feed path and having an entrance, for receipt of a rough workpiece, and an exit, for discharge of an at least partially finished workpiece, the optimizing  
20 planer having a cutting element;

(d) a workpiece interrogator situated along the workpiece feed path upstream of the entrance and operably coupled to the control system so to provide the control system with workpiece property information for each workpiece entering the optimizing planer;

(e) the control system constructed to provide the optimizing planer with control  
25 information based upon the workpiece property information for each workpiece; and

(f) the optimizing planer constructed to move at least one of the workpiece, cutting element or guiding element as the workpiece passes through the optimizing planer according to the control information for each workpiece.

5. An optimizing planer system comprising:

(a) an optimizing planer having an entrance, for receipt of a rough workpiece, and an exit, for discharge of an at least partially finished workpiece, the optimizing planer having a cutting element;

5 (b) means for interrogating each workpiece entering the optimizing planer and creating workpiece property information therefor;

(c) control system means, operably coupled to the workpiece interrogating means, for providing the optimizing planer with control information based upon the workpiece property information for each workpiece; and

10 (d) the optimizing planer comprising means for moving at least one of the workpiece, the cutting element or the guiding element as the workpiece passes through the optimizing planer according to the control information for each workpiece.